552015

Carol Hanlon
S&ER Products Manager
U. S. Department of Energy
Yucca Mountain Site Characterization Office
P.O. Box 30307 M/S 025

RECEIVED
OCT 15 2001

James E. Hopf
512 Acorn Ct.
Scotts Valley, CA 95066

Dear Ms. Hanlon:

I am writing to comment on the Yucca Mountain Site Recommendation being considered by Secretary Abraham. I urge the secretary to make a **POSITIVE** recommendation to President Bush. Several compelling reasons for moving forward with the Yucca Mountain Project are given below.

- **An unprecedented amount of scientific study (over 20 years) has shown that the Yucca Mountain repository would have no significant impact on public health.**

Even in the presence of water, the waste packages will fully contain the waste for ~1000 years, after which the activity level of the waste is relatively small (only ~10 times that of the original uranium ore). After ~10,000 years, the waste is only about as radioactive as the original ore. Given its *increased* isolation, as compared to the original ore, the repository will clearly result in no increase in overall U.S. public exposure after this time. The scientific studies have shown that the repository will result in maximum doses well under 15 mrem/year over the first 10,000 years. There is no scientific evidence of increased cancer rates from annual exposures of hundreds of millirem, let alone exposures of only a few millirem. For these reasons, the public health risk from the repository will be negligible.

- **Moving forward with the repository is a prerequisite for future nuclear power use in the US.**

There are compelling environmental, economic, and national energy security reasons for increasing the use of nuclear power over the coming decades. It is becoming more and more well known that the public health risks from fossil fuels (coal and oil) are much higher than those of nuclear power, including the risks from the repository. On top of this, use of coal and oil will have to decrease if there is any hope of making any kind of progress on reducing greenhouse gas emissions. Reducing coal and oil use will require significant increases in nuclear generating capacity, even if renewables and conservation are used to the maximum possible extent. Thus, moving forward with the repository will actually greatly reduce the overall risk to public health and the environment, because it will allow greater use of nuclear power, in place of significantly more dangerous energy sources. Greater use of nuclear power will also enhance fuel diversity and reduce energy use from foreign sources.

- **Starting the repository siting and evaluation process over from scratch is not a viable option.**

The Yucca Mountain site was initially selected because it has many desirable features for a repository (good geology, an arid, isolated location, etc.). An enormous amount of effort, far more than that made for any waste stream in the history of mankind, has been spent evaluating

the Yucca Mountain site. This includes 20 years of study, and almost 10 billion dollars spent. To throw away that amount of money, and to set the whole process back by another 20 years, is not acceptable. It would also be seen worldwide as a major defeat for repository siting process, and would shake confidence in our ability to deal with the waste issue. This would have a chilling effect on the entire world nuclear industry. (We should then start planning for the loss of our coastal cities!!)

- **Arguments concerning waste transportation risks are actually not relevant to the repository siting issue.**

The risks involved with nuclear waste shipment are extremely small (as the record shows). The risks from hazardous chemicals transportation are greater by orders of magnitude. Despite this, many people are overly concerned with waste transportation risks. However, it must be made absolutely clear that transportation of nuclear waste is INEVITIBLE, no matter what approach we finally take to deal with the waste. Whether we bury it in Yucca Mountain, bury it in a different location, reprocess the waste, or use some futuristic means of rendering it harmless, the fact is that the waste WILL be shipped from all the reactor sites to some central location. Thus, the waste transport risks are the same, no matter what option we choose. The only option that avoids transportation risks is to leave it at the reactor sites indefinitely, an option that clearly involves greater overall risk (as well as extreme, indefinite expenses) over the long term.

- **Placing the waste in a single, deep underground location will reduce risks associated with proliferation and/or terrorism.**

I do not believe the proliferation or terrorist attack risks associated with on-site storage of nuclear fuel are very significant, especially given the far better terrorist targets present within our nation, and the far easier methods of obtaining fissile material. However, whatever risks that are associated with nuclear waste will be minimized by moving forward with the Yucca Mountain Project. Having the waste securely buried deep underground is far more secure than having significant quantities of waste stored above ground at ~65 reactor sites across the country.

For all the above reasons, it is absolutely essential that the Yucca Mountain Project move forward, without further delay. This issue has received more scientific study than any other waste issue in history. The department has more than enough scientific evidence to justify proceeding with the Yucca Mountain site. The time for further study has passed. It is time for implementation. Thank you for your time and consideration.

Sincerely,

James E. Hopf

James E. Hopf